

The Mode Reform of Superior Education in the MOOC Times

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Abstract

With the progress of science and technology and the rise of the Internet, the network education has gradually come into people's sight. MOOC, as a new form of network education, has exerted an important influence on the Chinese higher education, and meanwhile, promoted the reform of higher education. In this paper, by analyzing the education idea of MOOC and the national educational conditions in China, as well as the impact of MOOC on China's higher education mode, accordingly, the writer poses opinions and suggestions on the development and the reform of higher education in the MOOC era. "While education has been both open and online, the sizeable enrolment numbers associated with massive open online courses (MOOCs) are somewhat unprecedented" (Knox, 2014, p.166).

Key words: MOOC; Higher education; Education reform

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INTRODUCTION

MOOC, as a deeply combined form fusing information technology and education teaching together, is known as the biggest innovation of education and the dawn of the future education since the invention of printing, and meanwhile, an important driving force of reform and

development of higher education. MOOC provides global learners with abundant learning resources, as well as a variety of learning opportunities. By means of MOOC, learners can acquire knowledge skills and accordingly improve their own learning cultivation. However, while we are enjoying the benefits MOOC bring us, we should also pay attention to the great influences MOOC brings on higher education. Facing MOOC storm, the institutions of higher education in our country should calmly ponder, rationally analyze, and actively explore the challenges and opportunities MOOC brings to higher education in China in MOOC era.

1. THE CONCEPT OF MOOC AND ITS MAIN CHARACTERISTICS

"MOOC, namely massive open online courses, called as Mu Ke in China, is a new teaching model whose emergence is a great challenge to the traditional classroom teaching mode" (Yu, 2014, p.136), which means large-scale Open Online Network Courses. Brian Alexander (Bryan Alexander) and Dave are the creators of this term. MOOC is a kind of open free online courses provided by the world-wide first-class universities' cooperation. Based on the old development model of the curriculum and with the help of the Internet' advantage, MOOC achieved a wider range of knowledge dissemination and teaching interaction, ending up as learners' access to acquiring knowledge and skills in the Internet age. MOOC is typical of three basic characteristics: large-scale application, free-open facility and online courses. Large scale: Up to tens of thousands of people, or even hundreds of thousands of people are lucky to be MOOC' objects. Large-scale means MOOC courses are different from traditional classroom teaching, there being no limit to the number of learning people, which is a unique teaching form of all time. "Research suggests that massive open online course (MOOC) students prefer to study in groups, and that

social facilitation within the study groups may render the learning of difficult concepts a pleasing experience” (Li et al., 2014, p.219). For example, the number of artificial intelligence courses taught by Sebastian and Shi Lang is up to 160,000, which confirms that large-scale is the essence of MOOC. Openness: MOOC platform is not for the purpose of profit, but interest-oriented, laying stress on resource sharing. With the arrival of the life-long education idea and the development of computer internet technology, the world-wide, first-class universities have been seeking a shortcut to promote school’s development and social development. Openness means that all the learners accessible to network in the world can have access to free education resources of high quality. Online courses: MOOC courses are not extracted from texts, but based on interactive learning supported by the Internet, which is typical of high flexibility instead of regional restriction. Meanwhile, learners can obtain corresponding college credits while completing online learning tasks and assessment. The real-time interaction is more convenient and flexible than the traditional classroom.

2. THE MAJOR EFFECT OF MOOC ON HIGHER EDUCATION OF OUR COUNTRY

2.1 The Influence on Higher Education Model in Our Country

2012 is the world’s “first year of MOOC”, while 2013 is the “first year of MOOC” in China. Some scholars believe that for mainland colleges and universities in China, MOOC not only opens a new page of the courses’ globalization, but also brings impact and challenges to traditional teaching mode of Chinese universities. As for the definition of teaching model, different schools of theories have different points of view, but whatever kind of teaching mode it belongs to, it has dual characteristics of theory and practice, and it is endowed with methods with a set of perfect teaching steps under the guidance of the theory to achieve certain education goals. MOOC reflects the teaching concept centered on the students’ learning, aiming to arouse the enthusiasm of the students. In teaching process, the MOOC video courses are divided into micro courses with tiny minutes, embedded with random tests in class, like clearance Settings in the game, which claims that only those who give the right answers can continue to follow the teacher, as the students’ attention need to be highly concentrated. At the same time, the tiny courses can meet the needs of learning anytime and anywhere. In this international environment, only high-qualified courses in the first-class universities can be exhibited on the MOOC platform, so if our national universities intend to join the MOOC courses, the colleges and universities in our country need create and open the same high-qualified courses. Online open

courses symbolize a university’s and even a country’s cultural software power, which confirms online courses and popularity level provided can reflect the level of a university’s education or the rendering of the national higher education power. As a result, the high qualified courses are bound to attract more learners’ attention, converting the traditional teaching mode, in which teachers are prior to others, to another mode, in which students’ autonomous learning is combined with teachers’ auxiliary teaching mode.

2.2 The Impact on the Teaching Methods of Our Country’s Higher Education

The traditional higher education lays emphasis on face-to-face communication between teachers and students, with teachers acting as the center. MOOC courses based on the network platform have developed into a kind of network course, with openness, interactivity of network education, democracy and autonomy, etc. working as its characters. These characteristics result in changes of the teaching method of higher education, and that MOOC courses enhanced the students’ autonomous learning ability is prior to other sides among the changes brought by MOOC. Wedemeyer, a professor of education at the Wisconsin University put forward the concept of independent learning, on the basis of Rogers’s humanism learning theory. He believes that “learners’ independent learning environment and school’s environment are totally different, in which learners can accept but never rely on the instructions from teachers, and learners shoulder learning responsibility for themselves and complete the corresponding learning tasks” (Rourke, 2000, p.62). Second, videos are prior to other sides in MOOC teaching methods, so the visual effect is more highlighted. In traditional teaching, teachers’ instructions play a leading role, supplemented by relevant videos, in which students lack the establishment of knowledge in the process of their learning, and learning becomes a dull and discharged thing. Finally, MOOC courses are different from traditional network courses because of students’ participation. MOOC network platform, like Coursera, Udacity and Udemy, etc., all have the corresponding online discussion groups, discussion BBS, and learning communities for learners’ autonomous learning. Traditional courses are limited by time and space, while MOOC learners can choose a variety of learning communication platforms, on which learners enjoy open and personalized learning platform.

2.3 The Impact on China’s Higher Education Quality

MOOC’s advantages lie: first, openness and co-sharing broke the limit of time and space of online learning. Second, top teachers in elite schools guaranteed teaching quality, so that the teaching quality is high. Third, interaction is frequent and strong. Ways like Micro courses, group discussion, etc. are more interactive

.than the traditional teaching ways, conforming to the laws of learning science. Fourth, the effective feedback mechanism can facilitate learners' analysis, delving learning data, so as to improve teaching. MOOC courses have broken the school walls, which brings the high-quality education resource before the eyes of the public, accelerating the process of popularization of higher education in our country. More and more students can enjoy free, cheap and high-quality education resource in the world, and accordingly, students' intelligence and knowledge get rising, and promote the improvement of teaching quality of higher education in China. On December 2, 2013, two courses provided by Shanghai Jiao Tong University meet the global learners on Coursera, just in which day, more than 10,000 students from more than 50 countries and regions in this world enroll the two courses and half of the students have been online to watch them. Ge Yonghua, a member of Jiusan community from Shanghai University, appealed that the full-time universities should upgrade so-called "computer- assisting instruction" (CAI) to "network auxiliary teaching" as soon as possible, because it can greatly improve the quality of teaching.

3. THE REVELATION FROM THE DEVELOPMENT OF HIGHER EDUCATION IN MOOC ERA

3.1 Transform the Traditional Educational Ideas, and the Outlook for Development of an University

The development and application of MOOC curriculum, not only depend on the first-class teachers' team, as well as technical support, but also rely on the support of money and in addition, setting up modern education concept is also a vital part. Unlike general properties, knowledge may generate new ideas only through dissemination and communication. Thus, university teachers need emancipate the mind and break the entrenchment state of knowledge, needless to trap themselves in the worry that their own course content or multimedia courseware may be plagiarized, or unwilling to participate in the construction of MOOC courses out of the worry that they may encounter with the questioning and criticism from peers. Instead, a positive attitude to meet the education reform is on top of other parts. At present, people's way of life is closely connected with the network, in view of which, higher education should break through the traditional teaching ideas, transform the development outlook of universities, train itself to adapt to the body of the network age, set up network education platform, appeal to more colleges and universities' active involvement, and finally realize the popularization and democratization of education.

3.2 Strengthen the Teamwork of Teachers and Improve the Quality of Courses

In today's society, the updating speed of information knowledge is very fast, in which situation, the requirement in imparting the most classic, and cutting-edge knowledge on MOOC courses to students is more urgent. Teachers not only need teach students knowledge, information and theory taken in the MOOC courses, but also need pass on the skills of using education resources of MOOC to students, for example, information collection, information analysis and integration, etc.. Therefore, college teachers should pay close attention to the professional development frontier, insist on in-depth discussion and research on a new problem, and keep up with the pace of this age closely, which not only claims that teachers need to possess a solid language foundation, but also need to be equipped with a wide range of knowledge and the capability of information technology. Course quality is a basic factor of any education form, so considering the specific requirements of MOOC for the course, the paper recommends that teachers in colleges and universities should strengthen the team cooperation, treating the cultivation of collective wisdom as a starting point, pooling the wisdom and efforts of everyone, shouldering individual obligation, promoting the growth of knowledge of each individual participant on MOOC course, enhancing the curriculum quality and curriculum cohesion, and ultimately providing high-quality online learning resources for the majority of learners.

3.3 Improve the Education Management System and Realize Resources Sharing

In face of the impact of the MOOC, universities should take measures to actively perfect the exposed problems and give scientific guidance to those problems. MOOC, as a kind of new education form, there are disadvantages in learning evaluation and credit certification. Even if some courses are offered certification, in credits accumulation, transformation and application, etc., they are still in the initial exploration stage. In addition, due to the form of online teaching, in the process of management, MOOC is accompanied by some problems such as the integrity and identification, etc.. Such defects cannot go without the perfection of the education management system from the experts, who are responsible for establishing a reliable anti-fraud mechanism, and exploring much more in dealing with these defects.

4. MOOC EDUCATION PRECEDENT IN THE UNITED STATES STIMULATES ITS DEVELOPMENT IN CHINA

4.1 The Storm of MOOC in the United States

The storm of MOOC engulfs the United States firstly, which not only benefits the capital's extensive

accumulation, but also brings hope to the political top. A recent issue of the magazine *Times* is aimed at higher education. Two noble authors: Barack Obama and Mitt Romney contributed to the issue of the magazine. The only consensus of the two elites is that the cost of higher education in the United States is too high. The high cost of life on medicine and education has been a sore point for voters and the statement of education innovation is always easy to scratch the itches for voters. The cover story of the magazine *Times* during this period, "engineering education", highlights the tendency of network education. The essay points out: The current American education mode has become increasingly diverse. For example, for the same introduction class of physics in a university, the cost is \$4200 at Georgetown University, the cost is \$1225 to \$1399 in a public university, the cost is \$1185 in online Phoenix University but if in experimental Udacity University, you don't need to spend money. As the statistics show, Online education has become a hot field, as almost every few weeks, a startup company offering online courses stood out, announcing its harvest of several- million dollars' investment, and in the past few months, in the United States, at least seven online startup companies announced products' release or financing support's acquisition. "MOOCS vary in their massiveness and openness and in the extent to which they are courses; and a wide range of MOOCS is emerging under different names" (Baggaley, 2013, p.370).

In the process, MIT and Harvard University invested \$60 million together to create the edX. Two professors at Stanford University launched Coursera, which currently is composed of more than 100 online courses, and blends more than 20 famous universities' cooperation including Harvard. A teacher in Udemy recently burgeoned into the first one with the first sale of \$1 million, indicating a landmark's emergence with a typical sense that the star teachers in the future can not completely rely on traditional colleges and universities, but root themselves in online education platform. Hence, MOOC is bound to get the favor of social re-education. On May 21, edX developed the first Asian group members, including Tsinghua university, Beijing university (microblogging), the university of Hong Kong [microblogging], [microblogging], Kyoto University, in Japan, Science and technology university in Hong Kong, Seoul National University in South Korea and other colleges and universities. At present, 27 members have applied themselves to edX.

MOOC in America embraces wide attention because of the following several aspects: First, because of the drive of population and economy, the percentage of the students insisting on online learning in American universities has been rising year after year, with an increase of 572,000 people from the fall of 2011 to the fall of 2010, ending

up with a total of 6.7 million people registering at least an online course by the end of 2011; Second, the course, Introduction to Artificial Intelligence created by Sebastian Thrun, a Stanford roboticist and a cooperative professor, Peter Norvig, received an enrollment of 160,000 people, with students spreading all over the world. Third, motivated by the above factors, many world-famous universities devote themselves to the course, with ivy league universities in the United States all joining it; Forth, media propaganda; Fifth, summary mode. The article of Nicholas Carr in the technological review site at MIT, Crisis of Higher Education is widely quoted, summarizing MOOC's teaching mode: data in campus, robot professors, flipped classroom, and education barriers' break. Hence, MOOC is bound to get the favor of social reeducation. Online education network in china comes into being after the precedent of America. The public class from an experienced teacher is a typical form of MOOC in China. When Chinese students choosing to study abroad are hustling for how to enter the school gate abroad unceasingly, via the Internet, free enjoyment of education from star professors in European and American Ivy League has become a reality. Free learning famous courses from world-famous universities has also become a kind of new learning model. Figures show that by the end of March 1, there are about 800,000 students from 192 countries learning edX 26 courses available, including students from China.

4.2 China's Colleges and Universities Stride Towards MOOC

Tsinghua University, Peking University and other universities will respectively launch a number of global online education courses in the near future, which symbolizes the large-scale development of online education and the kind of incisive reform could trigger the reform of global higher education. Colleges and universities in China have taken steps to stride forward, said Lin Huiqing, an assistant minister of the ministry of education.

Our findings suggest four reasons why students in China sign up for MOOCs: The desire to learn about a new topic or to extend current knowledge, they were curious about MOOCs, for personal challenge, and the desire to collect as many completion certificates as possible. (Hew, 2014, p.47)

As for the significance of the reform, Lu Fang, vice President of Fudan university (microblogging) holds his own point of view: it doesn't lie in high- quality resources shared in the external campus, but in teaching reform and new teaching mode really happening in the deep texture of the university And he reminded: We must clearly recognize that it does not simply mean putting a course online, or not a simple organization in the process of generalization.

CONCLUSION

MOOC is the new development of open education resources, bringing new elements and possible development of higher education. Although it is a process remaining to be developed and perfected, it has sparked profound changes in education ideas, education systems, personnel training and other aspects in the field of higher education. By means of MOOC, the teaching model can be propelled, which is of great significance in promoting the development of the discipline, reconstructing academic authority and promoting teaching quality.

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